

## Polar Stereographic projection and ArcView

Spatial data on this CD-ROM are in Polar Stereographic projection. This projection was chosen for the following reasons:

1. The Polar Stereographic projection is the usual choice for circumpolar maps.
2. The original paper geologic map and the IBCAO-2001 bathymetric data are in that projection.

ESRI **ArcView 3.X** series expects data in geographic coordinates in order to display them in one of the provided projections within a View.

If your data are not in Polar Stereographic projection, you will not be able to add them to the ArcView projects on this CD-ROM. There are several ways to resolve this problem:

1. Re-project your data to Polar Stereographic projection. In Arc View 3.2 you can use the **Projection Utility**. The parameters for the output shape file transformation are in the metadata files (shape/\*.prj), associated with each ArcView shape file. You can set them manually as:  
Projection - Stereographic, Spheroid - GCS\_Clarke\_1866, Central Meridian - 0, Central Parallel - 90.
2. Re-project ArcInfo coverages from this CD-ROM to geographic coordinates. Because the data are split at the 180 degree meridian, you will be faced with the tedious work of recreating polygon topology. This will require cleaning a large number of connecting lines caused by the split.  
An alternative to this process is to use the **ArcView 3.2 Projection Utility** with the parameters listed above. The output shape file can be then added to the ArcView project. In spite of many concentric circles caused by the split at 180 degree meridian, all the geologic polygons and labels will be visible.
3. Use ArcInfo coverages in geographic coordinates from this CD-ROM. They are provided with line and point topology only. Lines show linear geologic features and points show geologic age labels. To see an example click on the box below:

ArcView 3.2 project file  
(based on the coverages in geographic  
coordinates)

